

NOTEWORTHY COLLECTIONS

ARIZONA

UTRICULARIA MINOR L. (LENTIBULARIACEAE).—Apache Co., Fort Apache Indian Reservation, N33°56'25", W109°50', elev. 2160 m, Lake Woolsey, 24 June 1996, Meyers-Rice *s.n.* (ARIZ 326165). Scattered specimens occur in the SW portion of this *Pinus ponderosa*-bordered shallow lake, especially on margins of floating mud flats in 1.5 m of water, 20 m from the shore. Associated with *Utricularia macrorhiza*, *Menyanthes trifoliata*, *Alisma triviale*, and *Sparganium*.

Previous knowledge. Circumboreal throughout Europe, Asia, and North America; in the USA extending south to California!, Nevada, Utah, Colorado, Nebraska, Iowa, Illinois, Indiana, Michigan, Pennsylvania, and New Jersey. Previously reported in Arizona but these records are incorrectly identified specimens of *Utricularia macrorhiza* LeConte (ARIZ!, ASC!, ASU!, DES!). Errors in identification are usually due to the plastic nature of *U. macrorhiza* which is particularly extreme when it is stressed; sterile specimens of the two species are easily distinguished by the presence of well-developed apical and lateral leaf setulae on *U. macrorhiza*, and the production of dimorphic shoots by *U. minor*—one type bearing leafy portions with bladders, the other type bearing only bladders more or less anchored in mud (P. Taylor, *The Genus Utricularia: a taxonomic monograph*, Royal Botanic Garden, Kew, 1989). These characters were subsequently reproduced by plants in cultivation.

Significance. This is the first correctly identified record for Arizona, and is a southern extension of the plant's range in North America. Previous searches of high elevation wetlands in Arizona have failed to detect it, although the closely related species *U. macrorhiza* is occasionally encountered in ponds at elevations greater than 2400 m. This record may represent a chance and ephemeral introduction by wildfowl. The station containing *U. minor* is interesting for its relatively low elevation as well as for the presence of *Menyanthes trifoliata*, which in Arizona is recorded in only one other location. Careful monitoring of the site during 1996 failed to reveal any flowers suggesting *U. minor* rarely flowers (or does not flower) in Arizona, and may reproduce by vegetative means only. *Utricularia macrorhiza* flowers regularly in this and other Arizona wetlands.

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OREGON

LIGUSTRUM VULGARE L. (OLEACEAE).—Benton Co., Corvallis, Jackson-Frazier Wetland, in a wet wooded area with *Fraxinus*, *Rubus*, *Crataegus*, *Rosa*, *Alopecurus*, *Ranunculus*, T11S, R5W, DLC 45 or 46, elev. 69 m, 16 June 1996, *R. Halse* 5055 (OSC, duplicates to be distributed); same locality, in dry woods with *Acer*, *Rubus*, *Crataegus*, *Rosa*, *Cornus*, 4 July 1995, *R. Halse* 4937 (OSC, BH, SBBG).

Previous knowledge. This European native is a commonly cultivated ornamental. It has escaped in the northeastern USA (H. Gleason and A. Cronquist, *Manual of vascular plants of northeastern United States and adjacent Canada*, New York Botanical Garden, Bronx, 1995) and in Utah (S. Welsh et al., *A Utah flora*, Great Basin Naturalist Memoirs No. 9, 1987).

Significance. First report for Oregon.

EPILOBIUM HIRSUTUM L. (ONAGRACEAE).—Morrow Co., along U.S. Hwy 730, about

4 miles west of Umatilla, common in a wet roadside ditch with *Lythrum*, *Mimulus*, *Typha*, *Cirsium*, *Sonchus*, *Solidago*, T5N, R27E, S21, elev. 90 m, 6 July 1996, *R. Halse 5081* (OSC, MO, RSA, NY); Wasco Co., along Interstate Hwy 84 one mile W of its junction with Oregon Hwy 206 at Celilo Park, in wet area with *Melilotus*, *Asclepias*, *Cirsium*, *Sonchus*, *Rosa*, *Hypericum*, T2N, R15E, S20, elev. 69 m, 2 August 1996, *R. Halse 5145* (OSC, MO, UC, US).

Previous knowledge. This weedy Eurasian species is found in moist disturbed sites from southern Maine and Quebec to Maryland, west to northern Ohio, Michigan and northeast Illinois (Gleason and Cronquist op cit.). In Washington, it is known from wet places west of the Cascades as at Bellingham and Bingen (C. L. Hitchcock and A. Cronquist, *Flora of the Pacific Northwest*, Univ. of Washington Press, Seattle, 1973).

Significance. First record for Oregon.

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WASHINGTON

PITYOPUS CALIFORNICUS (Eastw.) H. F. Copel. (ERICACEAE).—Thurston Co., Fort Lewis Military Reservation, Rainier Training Area, 6.5 km NNE of the town of Rainier, WA, latitude 46°56'43"N, longitude 122°40'00"E, in 60-year-old *Pseudotsuga menziesii* stand, with *Gaultheria shallon*, *Pyrola* spp., and abundant moss (*Eurhynchium oregonum*), T17N R1E S22 NE¼ SW¼, 2 plants in deep moss, 130 m, 7 July 1995, *D. Thysell and S. Ball 735* (RSA, WTU) (verified by G. Wallace, RSA).

Previous knowledge. Known primarily from SW Oregon and N California. Though early collections are known from Humboldt Co., CA (V. Rattan 1878) and the Coast Range near Roseburg, OR (T. Howell 1887), the location of the northernmost known collection is from north of Mt. Hood, OR (*Pityopus oregona* Small, *Thomas Howell s.n.*, 3 July 1891, Holotype: NY). The Mt. Hood site has never been relocated. The subsequent northernmost collections are from the vicinity of Eugene, OR.

Significance. First record for Washington, a range extension of ca. 170 km north from the 1891 Howell collection locality and ca. 280 km north of other known sites in Oregon.

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CALIFORNIA

LARREA TRIDENTATA (DC.) Cov. (ZYGOPHYLLACEAE).—Kern Co.: Elk Hills, Naval Petroleum Reserve No. 1 (NPR-1), T31S, R24E, S2, 7 mature plants southeast of well 65-2G, 207 m, 24 June 1997, *J. M. Hinshaw s.n.* (UC); Kern Co.: Elk Hills, NPR-1, T31S, R24E, S4, 2 mature plants on W slope between wells 35-4G and 45-4G, 1020 ft (311 m), 24 June 1997, *J. M. Hinshaw s.n.* (UC); Kern Co.: Elk Hills, NPR-1, T31S, R23E, S10, 1 mature and 2 young plants 0.3 mi E of U.S. Navy Mercedes well, on S slope E of large wash, 281 m, 24 June 1997, *J. M. Hinshaw s.n.* (UC); Kern Co.: Elk Hills, NPR-1, T31S, R23E, S12, 1 mature plant 0.3 mi WNW of Gate 42 along Elk Hills Road, 244 m, 24 June 1997, *J. M. Hinshaw s.n.*

(UC); Kern Co.: Elk Hills, NPR-1, T30S, R23E, S33, 2 mature plants along road W of well 344-33R, 390 m, 24 June 1997, *J. M. Hinshaw s.n.* (UC). Biometrics and seed and biomass samples of the 15 plants observed were taken in July and August 1996. Ten, 4, and 1 plants were judged to be in high, moderate, and low vigor classes, respectively. The plant exhibiting low vigor was judged to be the youngest individual. Number of basal stems for the 15 plants averaged 6.67 (range = 1–18). Maximum basal diameters averaged 0.28 m (range = 0.01–0.65 m). Basal circumferences averaged 0.87 m (range = 0.02–1.70 m). Maximum foliar diameters averaged 4.07 m (range = 0.17–7.30 m). Foliar heights averaged 2.22 m (range = 0.11–3.34 m). The 2 young plants were growing within 5 m of an adult plant that had the highest basal circumference and maximum basal diameter, and the second highest number of basal stems of any adult plant observed. A fire killed both young plants and scorched the associated adult and 2 other adult plants in 1997.

Previous knowledge. Widespread in the southwestern United States and Mexico. Reported by D. M. Porter (*Zygophyllaceae*, pp. 1098–1099 in J. C. Hickman [ed.], *The Jepson manual: higher plants of California*, 1993) to occur as far west as parts of the South Coast, San Jacinto Mountain, and Tehachapi Mountain geographic areas. Twisselmann (*Wasmann Journal of Biology* 25:1–395, 1967) reported 3 plants growing west of the Sierra Nevada Range in Sand Canyon above Poso Creek and a single celebrated plant known as the “Dead Man’s Bush” growing on the Antelope Plains near Point of Rocks (Twisselmann 315, 1387) and mentioned the report of an isolated plant formerly growing on the Caliente Canyon flood plain. F. Tahbaz (personal communication) of the UC Herbarium located one 1898 collection (*A. A. Still s.n.*) from “Tulare plains, a solitary bush”, possibly the same individual Twisselmann referred to as the “Dead Man’s Bush”.

Significance. Westernmost occurrence of sexually reproductive individuals of and possibly the westernmost extant occurrence of this species. Twisselmann’s reported Point of Rocks individual is situated on gated private lands and its persistence has not been recently verified. Porter (1993) reports that clones of this species may live 10,000 years, longer than any other living plants known. Determining the age and genotype of *L. tridentata* at NPR-1 may provide insights about the history of this long-lived species and help ecologists better understand the regional paleoecology and paleoclimatic regimes. Evidence of historic surface disturbance at the first collection location noted here indicates possible introduction of this species to NPR-1 by human agency.

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CALIFORNIA

GLIDITISIA TRIACANTHOS L. (FABACEAE)—Sacramento Co., Cosumnes River Preserve, Galt, CA, N38°16′, W121°24′, 2 May 1997, *Randall and Meyers-Rice s.n.* (DAV 134241). Five young plants ranging from 2 to 15 dm tall were found growing in primary Valley oak riparian forest approximately 2.5 km southeast of the intersection of Desmond Road and Bruceville Road. This forest is dominated by mature *Quercus lobata*, *Populus fremontii*, *Fraxinus latifolia*, *Acer negundo* var. *californicum*, and *Salix goodingii*. *Vitis californica* vines climb into the overstory and prominent understory plants include *Rubus discolor*, *R. ursinus*, *Toxicodendron diversilobum*, *Oenothera sarmentosa*, and *Bidens vulgata*.

Previous knowledge. Native to the Mississippi Valley of the USA. Precise details of the original range of *G. triacanthos* are vague but it is believed to be within the area bounded by western Pennsylvania, extreme southern Michigan and southeastern Minnesota, southeastern South Dakota and central Nebraska, western Oklahoma,

northwestern and eastern Texas east to Alabama and northwestern Florida and north to eastern Tennessee and West Virginia (H. A. Gleason and A. Cronquist, *Manual of vascular plants of northeastern United States and adjacent Canada*, 1991; E. L. Little, Jr., *Checklist of native and naturalized trees of the United States (including Alaska)*, 1953). *G. triacanthos* is widely used horticulturally and has escaped from cultivation and become weedy east of the Appalachian Mountains from South Carolina to New England, north into southern Ontario, and west as far as western Kansas (Great Plains Flora Association, *Flora of the Great Plains*, 1986; E. L. Little, Jr., op. cit.). The species has also been reported as escaping from cultivation in the Buenos Aires Province of Argentina (A. L. Cabrera and E. M. Zardini, *Manual de la flora de los alrededores de Buenos Aires*, 1978), South Africa (M. J. Wells et al., *A catalogue of problem plants in Southern Africa*, 1986), New South Wales, Australia (N. C. W. Beadle et al., *Flora of the Sydney Region*, 1991), and Hungary (M. Rejmánek, personal communication). A thornless form (*G. triacanthos* f. *inermis* (Pursh) Schneid.) is occasionally encountered in natural populations and has been embraced by the nursery trade as an ornamental and shade tree; cultivated specimens are usually of this form. The saplings we found on the Cosumnes River Preserve did not have thorns and were probably of this variety.

Significance. First record in a California wildland. The closest reported occurrence of *G. triacanthos* outside of cultivation is in far western Kansas, approximately 1700 km distant (F. C. Gates, *Annotated list of the plants of Kansas*, 1940). Previous collections in California are limited to ones from a weedy lot in Orange Co. (F. M. Roberts, Jr., *A checklist of the vascular plants of Orange County, California*, 1989). Two saplings, also believed to be *G. triacanthos* f. *inermis*, were removed from the same area of the Cosumnes River Preserve in 1994–1995 and we believe that a yet-undiscovered parent plant may be growing nearby in the dense riparian forest. It is also possible that seed-pods from cultivated plants upstream were carried to the preserve during seasonal floods. This species has potential to become a troublesome weed in riparian forests of California's Central Valley, so we uprooted all the individuals we found and will search the area for a 'parent' plant and additional saplings periodically for the next several years.

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CALIFORNIA

MELISSA OFFICINALIS L. (LAMIACEAE). Inyo Co., Alabama Hills near Lone Pine. One site, May 10, 1993, T16S, R36E, SE¼, NE¼ S9, altitude 1150 m, near Los Angeles Aqueduct, *Yoder 6383* (DeDecker Herbarium, being transferred to RSA). (Determined by Mary DeDecker).

Previous knowledge. See Madroño 43(4):528.

Significance. First record for Inyo Co. and eastern Sierra.

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